

INTERNATIONAL PRELIMINARY EXAMINATION REPORT



(PCT Article 36 and Rule 70)

Applicant's or agent's file reference SCB 820 PCT		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/EP 03/12128	International filing date (day/month/year) 31.10.2003	Priority date (day/month/year) 07.11.2002	
International Patent Classification (IPC) or both national classification and IPC A61K51/04			
Applicant BRACCO IMAGING S.P.A. et al.			

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.
- This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 24.05.2004	Date of completion of this report 06.07.2004
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**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/EP 03/12128

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-17 as originally filed

Claims, Numbers

1-18 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

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**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-18
	No: Claims	
Inventive step (IS)	Yes: Claims	1-18
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-18
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP 03/12128

- D1: WO 91 03262 A (AMERSHAM INTERNATIONAL PLC, UK) 21 March 1991 (1991-03-21)
- D2: EP-A-0 949 265 (NIHON MEDIPHYSICS CO LTD) 13 October 1999 (1999-10-13)
- D3: DATABASE CA [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; ARTERBURN, JEFFREY B. ET AL: 'Functionalized organoimidorhenium(V) complexes as potential radiopharmaceuticals: syntheses of glycine derivatives and the structure determination of a rhenium analog of chlorambucil' retrieved from STN Database accession no. 126:151984 XP002227307 & ANGEWANDTE CHEMIE, INTERNATIONAL EDITION IN ENGLISH (1997), VOLUME DATE 1996, 35(23/24), 2877-2879 ,

1. Novelty

D1 concerns either (see page 21, lines 22-23) anionic ^{99}Tc -Imido-complexes having halogen ligands or PPh_3 or the 2 bidentate ligands containing complex referred to in line 24.

D3 concerns a ^{188}Re complex which is in analogy to the D1 complex (with the exception of the bidentate ligand)

D2 relates to neutral nitrido-complexes

Hence, D1 und D2 do not describe tridentate complexes and D3 does not describe anionic imido complexes. Hence, claims 1 and 15 are novel.

2. Inventive step

The problem to be solved was to make available new radio pharmaceuticals which can be prepared in small scale.

This problem has been solved by the compounds according to claim 1.

None of the documents on file suggests the presence of a tridentate ligand for the preparation of a IMIDO-complex. This concept has been suggested and implemented firstly in the present application.

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Claims 12-14 relate to the preparation of new and inventive compounds. They are, therefore, also acceptable with respect to Decision T 119/82 (see headnote 1).

Dependent claims 2-11 and 16-18 define further embodiments and likewise meet the requirements of the PCT.

The new intermediate according to claim 15 contributes a structural element to the final product and is used in an inventive process. It is therefore a means for carrying out the invention and as such equally patentable.

The document D1 has been identified in the description at page 1.